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DUNLAP, CODDING & ROGERS, P.C.PTO/SB/21 (08-00)  
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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	09/469,200
	Filing Date	12/21/1999
	First Named Inventor	Paul Weigel, et al.
	Group Art Unit	1653
	Examiner Name	G. Bugaisky
Total Number of Pages in This Submission	Attorney Docket Number	35541.011

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
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<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	1. Transmittal Form (1 page); 2. Fee Transmittal Form (1 page) with authorization to charge indicated fees of \$180.00 (which include \$180.00-filing of IDS) and any additional fee required and/or credit any overpayments to Deposit account Dunlap, Coddling & Rogers, P.C.; 3. Information Disclosure Statement (6 pages); 4. Information Disclosure Statement by Applicant (5 pages); and 5. Copies of Cited References.	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	DUNLAP, CODDING & ROGERS, P.C., Customer Number 30589 Douglas J. Sorocco, P. O. Box 16370, Oklahoma City, Oklahoma 73113
Signature	
Date	7.14.2003

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

# FEE TRANSMITTAL for FY 2003

Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 180

## Complete if Known

Application Number 09/469,200  
Filing Date 12/21/1999  
First Named Inventor Paul Weigel, et al  
Examiner Name G. Bugaisky  
Art Unit 1653  
Attorney Docket No. 35541.011

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
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Deposit  
Account  
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☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$ 0

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims  - 59\*\* =  X  = \$0  
Independent Claims  - 3\*\* =  X  = \$0  
Multiple Dependent  = \$0

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	84	2201	42	Independent claims in excess of 3	
1203	280	2203	140	Multiple dependent claim, if not paid	
1204	84	2204	42	** Reissue independent claims over original patent	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					(\$ 0

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	180
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 180

## SUBMITTED BY

Name (Print/Type) Douglas J. Sorocco

Registration No. 43,145  
(Attorney/Agent)

(Complete if applicable)

Telephone (405) 607-8600

Signature

Date 07/14/2003

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE



Substitute for form 1449A/PTO		<b>C mplete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/469,200
		Filing Date	12/21/1999
		First Named Inventor	Paul Weigel, et al.
		Group Art Unit	1653
		Examiner Name	G. Bugaisky
Sheet 1	of 5	Attorney Docket Number	35541.011

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U.S. PATENT DOCUMENTS						
Examiner Initials <sup>*</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	1	RE37336		Weigel, et al.	09/21/2001	
	2	4224179		Schneider	09/23/1980	
	3	4235871		Papahadjopoulos, et al.	11/25/1980	
	4	4511478		Nowinski, et al.	04/16/1985	
	5	4517295		Bracke, et al.	05/14/1985	
	6	4615697		Robinson	10/07/1986	
	7	4708861		Popescu, et al.	11/24/1987	
	8	4780414		Nimrod, et al.	10/25/1988	
	9	4782046		Brown, et al.	11/01/1988	
	10	4784990		Nimrod, et al.	11/15/1988	
	11	4801539		Akasaka, et al.	01/31/1989	
	12	4822867		Erhan	04/18/1989	
	13	4983392		Robinson	01/08/1991	
	14	5015577		Weigel, et al.	05/14/1991	
	15	5023175		Hosoya, et al.	06/11/1991	
	16	5071751		Morita, et al.	10/12/1991	
	17	5171689		Kawaguri, et al.	12/15/1992	
	18	5217743		Farah	06/08/1993	
	19	5337747		Neftel	08/16/1994	
	20	5472704		Santus, et al.	12/05/1995	

FOREIGN PATENT DOCUMENTS							
Examiner Initials <sup>*</sup>	Cite No. <sup>1</sup>	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>				
	A		0036776 EPO	Kleid, et al.	05/11/1988		
	B		0144019 EPO	Brown, et al.	06/13/1990		
	C		0195303 EPO	Grandi, et al.	11/08/1989		
	D		0244757 EPO	Hosoya, et al.	11/09/1994		
	E		0266578 EPO	Miyamori, et al.	07/07/1993		
	F		91/03559 WO	Weigel, et al.	03/21/1991		
	G		94/00463 WO	Prehm, et al.	01/06/1994		
	H		95/24497 WO	Lansing, et al.	09/14/1995		
	I		95/33067 WO	Stohl, Sten	12/07/1995		
	J		97/20061 WO	Wong, et al.	06/05/1997		

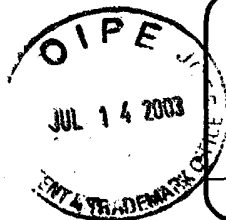
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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 5

**Complete if Known**

<b>Application Number</b>	09/469,200
<b>Filing Date</b>	12/21/1999
<b>First Named Inventor</b>	Paul Weigel, et al
Group Art Unit	1653
<b>Examiner Name</b>	G. Bugaisky
<b>Attorney Docket Number</b>	35541.011

own

et al.

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## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T8
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	K		8-38336 JP		Itano, et al.	1996		
	L		4-124854 JP			1992		
	M		4-134854 JP			1992		
	N		61-257169 JP			1986		
	O		4-80202			03/13/1992		
	P		63094988 JP			1988		
	Q		62032893 JP			1987		
	R		4-158796 JP			1992		
	S		2249315 GB		Sato, et al.	05/06/1992		

Examiner  
Signature

Date	
Considered	

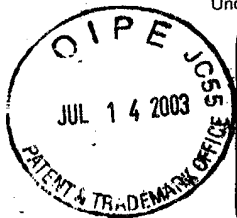
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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Application Number</b>	09/469,200
		<b>Filing Date</b>	12/21/1999
		<b>First Named Inventor</b>	Paul Weigel, et al.
		<b>Group Art Unit</b>	1653
		<b>Examiner Name</b>	G. Bugaisky
<b>Attorney Docket Number</b>	35541.011		
<b>Sheet</b>	3	<b>of</b>	5

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AA	"THE PRODUCTION OF CAPSULES, HYALURONIC ACID AND HYALURONIDASE BY GROUP A AND GROUP C STREPTOCOCCI", MacLennan, J. Gen. Microbiol., 14:134-142 (1956).	
	BB	"THE ISOLATION AND CHARACTERIZATION OF A HYALURONIDASE PRODUCED BY A CAPSULATED STRAIN OF GROUP C STREPTOCOCCUS", MacLennan, J. Gen. Microbiol., 14:143-152 (1956).	
	CC	"THE BIOSYNTHESIS OF HYALURONIC ACID BY GROUP A STREPTOCOCCUS", Markovitz et al., J. Biol. Chem., 234 (9):2343-2350 (1959).	
	DD	"THE BIOSYNTHESIS OF HYALURONIC ACID BY STREPTOCOCCUS," Stoolmiller, et al., Journal of Biological Chemistry, Vol. 244, No. 2, pp. 236-246 (1969).	
	EE	"BIOSYNTHESIS OF HYALURONIC ACID BY STREPTOCOCCUS", Sugahara et al., J. Biol. Chem., 254:6252-6261 (1979).	
	FF	"MODERN GENETICS," Ayala, et al., Benjamin/Cummings Publishing Col., Menlo Park CA, p. 45 (1980).	
	GG	"STRAINS OF ESCHERICHIA COLI CARRYING THE STRUCTURAL GENE FOR HISTIDYL-tRNA SYNTHETASE ON A HIGH COPY-NUMBER PLASMID," Eisenbeis, et al., Mol. Gen. Genet. 183:115-122 (1981).	
	HH	"SYNTHESIS OF HYALURONATE IN DIFFERENTIATED TERATOCARCINOMA CELLS," Prehm, et al., J. Biochem, Vol. 211, pp. 181-189 (1983).	
	II	"STREPTOCOCCAL HYALURONIC ACID: PROPOSED MECHANISMS OF DEGRADATION AND LOSS OF SYNTHESIS DURING STATIONARY PHASE", Van de Rijn, J. Bacteriol., 156(3):1059-1065 (1983).	
	JJ	"SOLUBILIZATION OF HYALURONIC ACID SYNTHETIC ACTIVITY FROM STREPTOCOCCI AND ITS ACTIVATION WITH PHOSPHOLIPIDS", Triscott et al., J. Biol. Chem., 261(13):6004-6009 (1986).	
	KK	"ISOLATION OF STREPTOCOCCAL HYALURONATE SYNTHASE", Prehm et al., Biochem. J., 235:887-889 (1986).	

<b>Examiner Signature</b>		<b>Date Considered</b>	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 4 of 5

### Complete if Known

Application Number	09/469,200
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First Named Inventor	Paul Weigel, et al.
Group Art Unit	1653
Examiner Name	G. Bugaiskv
Attorney Docket Number	35541.011

### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials <sup>*</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	LL	"ISOLATION, STRUCTURE AND EXPRESSION OF MAMMALIAN GENES FOR HISTIDYL-tRNA SYNTHETASE," Tsui, et al., Nucleic Acids Research, Vol. 15, No. 8, pp. 3349-3367, (1987).	
	MM	"SHUTTLE VECTORS CONTAINING A MULTIPLE CLONING SITE AND A LACZA GENE FOR CONJUGAL TRANSFER OF DNA FROM ESCHERICHIA COLI TO GRAM-POSITIVE BACTERIA," Trieu-Cout, et al., Gene, Vol. 102, pp. 99-104, (1991).	
	NN	"ANALYSIS OF THE STREPTOCOCCAL HYALURONIC ACID SYNTHASE COMPLEX USING THE PHOTOAFFINITY PROBE 5-AZIDO-UDP-GLUCURONIC ACID," Van de Rijn, et al., J. Biol., Chem., Vol. 267, No. 34, pp. 24302-24306, (1992).	
	OO	"MOLECULAR CHARACTERIZATION OF A LOCUS REQUIRED FOR HYALURONIC ACID CAPSULE PRODUCTION IN GROUP A STREPTOCOCCI," Dougherty, et al., J. Exp. Med., Vol. 175, pp. 1291-1299, (1992).	
	PP	"HYALURONAN," Laurent, et al., FASEB Journal, Vol. 6, pp. 2397-2404, (1992).	
	QQ	"ISOLATION OF A STREPTOCOCCUS PYOGENES GENE LOCUS THAT DIRECTS HYALURONAN BIOSYNTHESIS IN ACAPSULAR MUTANTS AND IN HETEROLOGOUS BACTERIA," DeAngelis, et al., J. Biol. Chem., Vol. 268, No. 20, pp. 14568-14571, (1993).	
	RR	"HYALURONATE SYNTHASE: CLONING AND SEQUENCING OF THE GENE FROM STREPTOCOCCUS SP.," Lansing, et al., J. Biochem., Vol. 289, pp. 179-184, (1993).	
	SS	"MOLECULAR CHARACTERIZATION OF HASB FROM AN OPERON REQUIRED FOR HYALURONIC ACID SYNTHESIS IN GROUP A STREPTOCOCCI," Dougherty, et al., J. Biol. Chem., Vol. 268, No. 10, pp. 7118-7124, (1993).	
	TT	"MOLECULAR CLONING, IDENTIFICATION, AND SEQUENCE OF THE HYALURONAN SYNTHASE GENE FROM GROUP A STREPTOCOCCUS PYOGENES," DeAngelis, et al., J. Biol. Chem., Vol. 268, No. 26, pp. 19181-19184, (1993).	
	UU	"MOLECULAR CHARACTERIZATION OF HASA FROM AN OPERON REQUIRED FOR HYALURONIC ACID SYNTHESIS IN GROUP A STREPTOCOCCI," Dougherty, et al., J. Biol. Chem., Vol. 269, No. 1, pp. 169-175, (1994).	
	VV	"THE STREPTOCOCCUS PYOGENES HYALURONAN SYNTHASE: SEQUENCE COMPARISON AND CONSERVATION AMONG VARIOUS GROUP A STRAINS," DeAngelis, et al., Biochem. and Biophys. Res. Comm., Vol. 199, No. 1, pp. 1-10, (1994).	

Examiner  
Signature

Date

Considered

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### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

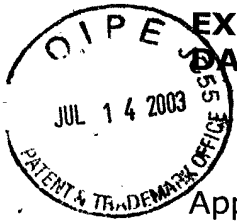
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	WW	"MOLECULAR FINGERPRINTING OF PASTEURELLA MULTOCIDA ASSOCIATED WITH PROGRESSIVE ATROPHIC RHINITIS IN SWINE HERDS". Gardner et al. Database Medline on Dialog, US Nat'l. Library of Medicine (Bethesda, MD, USA) No. 95161494, Abstract, J. Vet. Diagn. Invest. Oct. 1994. Vol. 6, No. 4 pages	
	XX	"THE ELUCIDATION OF NOVEL CAPSULAR GENOTYPES OF HAEMOPHILUS INFLUENZAE TYPE B WITH THE POLYMERASE CHAIN REACTION. Leaves et al. J. Medical Microbiology. 1995, Vol. 43, pages 120-124, entire document.	
	YY	"HOMOLOGS OF THE XENOPUS DEVELOPMENTAL GENE DG42 ARE PRESENT IN ZEBRAFISH AND MOUSE AND ARE INVOLVED IN THE SYNTHESIS OF NOD-LIKE CHITIN OLIGOSACCHARIDES DURING EARLY EMBRYOGENESIS", Semino et al., Proc. Natl Acad. Sci. USA, 93:4548-4553 (1996).	
	ZZ	"ENZYMOLOGICAL CHARACTERIZATION OF THE PASTEURELLA MULTOCIDA HYALURONIC ACID SYNTHASE", DeAngelis, Biochemistry, 35 (30): 9768-9771 (1996).	
	aa	"CONSTRUCTION AND CHARACTERIZATION OF A POTENTIAL LIVE ORAL CARRIER-BASED VACCINE AGAINST VIBRIO CHOLERAEE". Favre et al. Infection and Immunity. September 1996. Vol. 64, No. 9 pages 3565-3570, entire document.	
	bb	"MOLECULAR CLONING, EXPRESSION, AND CHARACTERIZATION OF THE AUTHENTIC HYALURONAN SYNTHASE FROM GROUP C STREPTOCOCCUS EQUISIMILIS", Kumari and Weigel, J. Biol. Chem., 272(51): 32539-32546 (1997).	
	cc	"HYALURONAN SYNTHASES", Weigel et al., J. Biol. Chem., 272 (22): 13997-14000 (1997).	
	dd	"IDENTIFICATION AND MOLECULAR CLONING OF A UNIQUE HYALURONAN SYNTHASE FROM PASTEURELLA MULTOCIDA", DeAngelis et al., J. Biol. Chem., 273(14): 8454-8458 (1998).	
	ee	"THE CAPSULE BIOSYNTHETIC LOCUS OF PASTEURELLA MULTOCIDA A:1. Chung, et al. FEMS Microbiol. Lett. 15 September 1998, Vol. 166, No. 2, pages 289-296, entire document.	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



**EXPRESS MAIL NO.: EV 336512225 US**  
**DATE DEPOSITED: JULY 14, 2003**

**PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Paul Weigel, Kshama Kumari  
and Paul DeAngelis

Atty. Dkt. No. 35541.011

Serial No.: 09/469,200

Art Unit: 1653

Filed: December 21, 1999

Examiner: G. T. POISKY

For: HYALURONAN SYNTHASE GENE  
AND USES THEREOF

Confirmation No. 4696

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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## **INFORMATION DISCLOSURE STATEMENT**

### **List of Sections Forming Part of This Information Disclosure Statement**

The following sections are being submitted for this Information Disclosure Statement:

1. ☒ Preliminary Statements
2. ☒ Forms PTO/SB/08A and 08B (formerly Form PTO-1449)
3. ☒ Statement as to Information Not Found in Patents or Publications
4. ☐ Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted
5. ☐ Cumulative Patents or Publications





6. ☒ Copies of Listed Information Items Accompanying this Statement
7. ☐ Concise Explanation of Non-English Language Listed Information Items
  - 7A. ☐ EPO Search Report
  - 7B. ☐ English Language Version
8. ☐ Translation(s) of Non-English Language Documents
9. ☐ Concise Explanation of English Language Listed Information Items (Optional)
10. ☒ Identification of Person(s) Making this Information Disclosure Statement

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#### **Section 1. Preliminary Statements**

Applicants submit herewith patents, publications or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. § 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

#### **Section 2. Forms PTO/SB/08A and 08B (formerly Form PTO-1449)**

- ☒ A completed Form PTO/SB/08A and/or Form PTO/SB/08B is attached hereto.

**Section 3. Statement as to Information Not Found in Patents or Publications (Information Not Listed in Form PTO-1449)**

The present invention relates to a nucleic acid segment having a coding region segment encoding enzymatically active *Streptococcus equisimilis* hyaluronate synthase (seHAS), and to the use of this nucleic acid segment in the preparation of recombinant cells which produce hyaluronate synthase and its hyaluronic acid product. Hyaluronate is also known as hyaluronic acid or hyaluronan.

**Section 4. Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted**

This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior application Serial No. \_\_\_\_\_, filed on \_\_\_\_\_ (date).

*(complete the following, if applicable)*

- ☐ This application also relies, under 35 U.S.C. 120, on the earlier filing date of prior application Serial No. \_\_\_\_\_, filed on \_\_\_\_\_ (date).

The following references were submitted to, and/or cited by, the Office in the prior application(s) and therefore, are not required to be provided in this application:

**Section 5. Cumulative Patents or Publications**

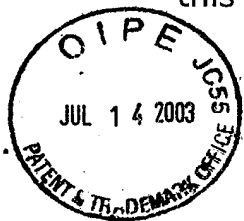
**STATEMENT**

\_\_\_\_\_ is cumulative of the following patents or publications listed on Form PTO-1449:

In accordance with 37 C.F.R. § 1.98(c), a copy of only \_\_\_\_ is being submitted with this Information Disclosure Statement.

**Section 6. Copies of Listed Information Items Accompanying this Statement**

Legible copies of all items listed in Form PTO-1449 (Modified) accompany this information disclosure statement.



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- ☐ Exception(s) to above:
- ☐ Items in prior application from which an earlier filing date is claimed for this application, as identified in Section 4.
- ☐ Cumulative patents or publications identified in Section 5.

### **Section 7. Concise Explanation of Non-English Language Listed Information Items**

#### **Section 7A. Concise Explanation of Non-English Language Listed Information Items - EPO Search Report**

The relevance with respect to the following citations listed on Form PTO-1449:

is submitted on the basis of accompanying:

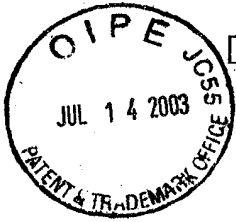
*(check the appropriate item)*

- ☐ EPO search report that is in the English language,
- ☐ EPO search report that is not in the English language and that is accompanied also by an English language version of the EPO search report,

that issued on the corresponding European patent application.

#### **Section 7B. Concise Explanation of Non-English Language Listed Information Items - English Language Version of EPO Search Report**

### **Section 8. Translation(s) of Non-English Language Documents**



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☐

Submitted herewith is an English translation of the following foreign language patents, publications or information or of those portions of those patents, publications or information considered to be material:

*(complete the following, if applicable)*

☐

No English language translations of the foreign language parents, publications or information or parts thereof are readily available, except for those listed above.

☐

The following foreign language documents submitted are believed to be the equivalent or substantial equivalent of the English language documents identified below, which are also submitted herewith.

**Section 9. Concise Explanation of English Language Listed Information Items (OPTIONAL)**

**Section 10. Identification of Person(s) Making this INFORMATION DISCLOSURE STATEMENT**

The person making this statement is the agent/attorney who signs below on the basis of the information:

☐

supplied by the inventor(s)

☐

supplied by an individual associated with the filing and prosecution of this application (37 C.F.R. § 1.56(c)).

☒

in the agent/attorney's file



Respectfully submitted,

A handwritten signature in dark ink, appearing to be "DS", written over a horizontal line.

Douglas J. Sorocco, Reg. No. 43,145  
DUNLAP, CODDING & ROGERS, P.C.  
1601 NW Expressway, Suite 1000  
Oklahoma City, Oklahoma 73118  
(405) 607-8600 - telephone  
(405) 607-8686 - telefax

Attorney for Applicants

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